

PRODUCT DATA SHEET

ADNOC Refrigeration Oil PE

DESCRIPTION

ADNOC Refrigeration Oil PE is a high performance synthetic refrigeration lubricant series based on polyolester (POE) base oils and selected additives to provide long life and effective wear protection for bearing surfaces, increased system life and improved efficiency in extreme operating conditions.

APPLICATIONS

ADNOC Refrigeration Oil PE is recommended for use in refrigeration and air-conditioning compressors using ozone-friendly HFC refrigerant fluids like R134a, R404a, R410a etc. It can also be used with old technology refrigerants CFC and HCFC like R-12, R-22 etc.

BENEFITS

Protects the different components of the refrigerating loop: ASHRAE thermal stability tests confirms the excellent behaviour of the lubricant at high temperature in presence of refrigerant, water and metallic components.

Neutral behaviour with the refrigerating equipments:

- Anti-rust, anti corrosion properties with copper metals.
- Compatible with varnishes, elastomer and paints.
- High resistance to hydrolysis.
- Low dilution of refrigerant in oil for the high viscosity grades, for good lubricity and oil separation properties (low carry-over).

Enhances the efficiency of the refrigerating equipment: The good miscibility of the fluid viscosities of ADNOC Refrigeration Oil PE allows a good oil return property, specially in dry-ex equipments. Oil will not reduce then the efficiency of the heat exchangers.

SPECIFICATIONS

ADNOC REFRIGERATION OIL PE series meet the requirements of large number of compressor manufactures like BITZER, BLISSFIELD, BOCK, CARRIER, DORIN, FRASCOLD, GRASSO, MCQUAY, SABROE, TECUMSEH and others.



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PRODUCT TYPICAL CHARACTERISTICS

| Properties | Units | ISO VG | | | | | Test |
|----------------------------|-------------|--------|-------|-------|-------|-------|------------|
| | | 32 | 46 | 68 | 100 | 220 | Methods |
| Density @20°C | kg/L | 0.977 | 0.977 | 0.977 | 0.969 | 0.975 | ASTM D1298 |
| Kinematic Viscosity @40°C | mm²/s | 32.50 | 45.30 | 66.60 | 96.50 | 215.0 | ASTM D445 |
| Kinematic Viscosity @100°C | mm²/s | 5.800 | 7.100 | 9.400 | 11.30 | 18.80 | ASTM D445 |
| Viscosity Index | - | 121 | 116 | 120 | 103 | 98 | ASTM D2270 |
| Pour Point | °C | -46 | -46 | -39 | -28 | -25 | ASTM D97 |
| Flash Point, COC | °C | 258 | 260 | 270 | 260 | 280 | ASTM D92 |
| TAN | mg KOH/g | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | ASTM D974 |

Minor variations in product typical test data are to be expected in normal manufacturing.

Always follow the Original Equipment Manufacturer's recommendation (OEM) for the equipment operating conditions, product specification, drain interval and customer's maintenance practices.

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